

**Notice of Allowability**

Application No.	10/644,936	Applicant(s)	SHINOHARA ET AL.
Examiner	Ranodhi Serrao	Art Unit	2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 31 October 2007.
2.  The allowed claim(s) is/are 41-46.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

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Notice of Allowability  
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***Interview Summary***

1. A proposed amendment was submitted for applicant's consideration. Examiner suggested Applicant to amend claims as shown in the Examiner's Amendment below in order to place the application in condition for allowance.

***Examiner's Amendment***

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with the Applicant's Representative, Colin D. Barnitz (Reg. No. 35,061), on 7 December 2007.

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**Amendment to the Claims**

Please replace all claims as shown below:

IN THE CLAIMS:

1. - 40. (Canceled)

41. (Currently Amended) A computer system comprising:

a first service-providing computer storing a first program;

a second ~~service providing~~ computer coupled to said first ~~service providing~~ computer via a network and storing one or more second programs; and

a ~~service utilizing~~ third computer coupled to said first ~~service providing~~ computer via the network,

a ~~service disclosing device~~ fourth computer coupled to said first ~~service providing~~ computer, said second ~~service providing~~ computer, and said ~~service utilizing~~ third computer via said network, said ~~service disclosing device~~ fourth computer collecting relationship information regarding whether a dependent relationship hierarchy exists between said first program on said first ~~service providing~~ computer and said one or more second programs on said second ~~service providing~~ computer;

wherein, when said dependent relationship exists, said ~~service disclosing device~~ fourth computer discloses said first program to said ~~service utilizing~~ third computer and does not disclose said second ~~service providing~~ computer and said one or more second programs upon which the first program depends to said ~~service utilizing~~ third computer,

wherein said first ~~service providing~~ computer:

stores association information related to the dependent relationship between said first program and said one or more second programs,

receives, from said ~~service utilizing~~ third computer, a first request for executing said first program,

determines whether or not said first program depends on one or more of said

second programs on the basis of said association information,  
executes said first program and sends a second request to said second  
service-providing-computer when said first program depends on one or more of said  
second programs, said second request including instructions to execute said one or  
more second programs,  
receives execution results produced by the execution of said one or more  
second programs from said second service-providing-computer,  
uses the execution results of the one or more second programs to generate a  
response from execution of said first program, and  
sends to said service-utilizing third computer the response generated from  
execution of said first program incorporating the execution results of the one or more  
second programs in reply to said first request,  
wherein said second service-providing-computer receives said second  
request, executes said one or more second programs upon which said first program  
depends, and sends the execution results to said first service-providing-computer  
without disclosure to the service-utilizing third computer of said second service-  
providing-computer or said one or more second programs.

42. (Currently Amended) A computer system according to claim 41,  
wherein said service-disclosing device fourth computer collects location  
information related to locations where said first program or said one or more second  
programs are stored, and provides said association information to said first service-

~~providing computer, whereby said first service providing computer determines whether the dependent relationship exists between said first program and the one or more second programs.~~

43. (Previously Presented) A computer system according to claim 41,  
wherein said association information is a hierarchy information indicating whether said first program is of a higher level so as to be dependent on results produced by said one or more second programs associated with said first program.

44. (Currently Amended) A computer system according to claim 43,  
wherein said second ~~service providing~~ computer makes a request for service registration to said ~~service disclosing device~~ fourth computer for each of said one or more second programs on said second ~~service providing~~ computer, said request for service registration including the hierarchy information,  
wherein said first ~~service providing~~ computer makes a request for service registration to said ~~service disclosing device~~ fourth computer for said first program on said first ~~service providing~~ computer, said request for service registration including the hierarchy information, and  
wherein said ~~service disclosing device~~ fourth computer provides the association information regarding which program of said first program or said one or more second programs is of a higher level than its associated program on the basis

of said hierarchy information.

45. (Currently Amended) A computer system according to claim 41,  
wherein said execution results are respective pieces of data that a plurality of  
said second programs send back to said first ~~service-providing~~ computer, and  
wherein said first ~~service-providing~~ computer aggregates the respective  
pieces of data that said second programs send back into said response, and  
responds to said ~~service-utilizing~~ third computer.

46. (Previously Presented) A computer system according to claim 41,  
wherein said first request is a request for acquisition of status information  
about a device, and the response to the first request is the status information about  
said device.

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#### ***Allowable Subject Matter***

4. Claims 41-46 are allowed. The following is an examiner's statement of reasons  
for allowance: In interpreting the claims, in light of the specification and the authorized  
Examiner's Amendment on 7 December 2007, the Examiner finds the claimed invention  
to be patentably distinct from the prior art of record.

5. Examiner interprets the claim language of "a first computer" to be hardware as recited in the specification on page 3, lines 11-13 and as shown in figures 18 and 20. "A first computer" correlates to the first service providing device 100.
6. **Earl et al. (6,112,228)** teaches a system and method efficiently provides services offered by proxy servers to client computers coupled to a network. The system comprises a proxy server interface configured to expose the services within a web browser executing on a client computer. The services available to the client are dependent upon the topology of the network coupling the client to the proxy servers and the access rights of the client with respect to the services. The invention further provides an efficient method that allows clients to inherit functionality from the proxy servers as a function of the network topology and access rights (**Earl, abstract, Figure 6, and corresponding text**).
7. **Dutta et al. (2003/0050966)** teaches a methodology for operating a data sharing application in a peer-to-peer network is presented. After a first peer node receives a request for a copy of a specified file from a second peer node, the first peer node may either return a copy of the specified file or a response message containing an alternate node list associated with the specified file. The alternate node list contains a set of node identifiers indicating a set of alternate peer nodes within the peer-to-peer network that may have a copy of the specified file. The alternate node list is dynamically maintained at each peer node. The response provided by the first peer node, i.e. either a copy of the specified file or the alternate node list, can be determined based on an operational

condition of the first peer node, e.g., whether or not the first peer node is experiencing an overload condition (**Dutta, abstract, Figure 7B, and corresponding text**).

8. However, the prior art of record fail to teach or suggest individually or in combination a computer system comprising: a first computer storing a first program; a second computer coupled to said first computer via a network and storing one or more second programs; and a third computer coupled to said first computer via the network, a fourth computer coupled to said first computer, said second computer, and said third computer via said network, said fourth computer collecting relationship information regarding whether a dependent relationship hierarchy exists between said first program on said first computer and said one or more second programs on said second computer; wherein, when said dependent relationship exists, said fourth computer discloses said first program to said third computer and does not disclose said second computer and said one or more second programs upon which the first program depends to said third computer, wherein said first computer: stores association information related to the dependent relationship between said first program and said one or more second programs, receives, from said third computer, a first request for executing said first program, determines whether or not said first program depends on one or more of said second programs on the basis of said association information, executes said first program and sends a second request to said second computer when said first program depends on one or more of said second programs, said second request including instructions to execute said one or more second programs, receives execution results produced by the execution of said one or more

second programs from said second computer, uses the execution results of the one or more second programs to generate a response from execution of said first program, and sends to said third computer the response generated from execution of said first program incorporating the execution results of the one or more second programs in reply to said first request, wherein said second computer receives said second request, executes said one or more second programs upon which said first program depends, and sends the execution results to said first computer without disclosure to the third computer of said second computer or said one or more second programs.

9. These limitations, in conjunction with the other limitations in the independent claim, are not specifically disclosed or remotely suggested in the prior art of record. Therefore, claims 41-46 are allowed.

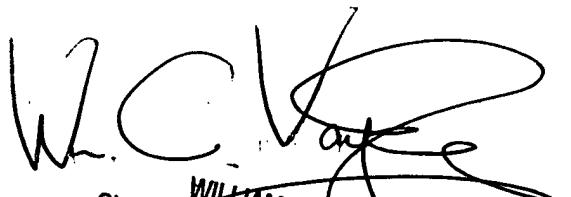
10. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ranodhi Serrao whose telephone number is (571) 272-7967. The examiner can normally be reached on 8:00-4:30pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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